

ABSTRACT

The subject of the present invention is a method for obtaining transgenic plants expressing a protein with H₂O₂ producing activity, which comprises the following steps of:

- (a) transforming plant cells with *Agrobacterium rhizogenes* containing a vector carrying a gene encoding a protein producing H₂O₂ in a context which allows its expression in the plant;
- (b) selecting the transformants which contain and express this gene, by a peroxidase-based colorimetric test;
- (c) regenerating the plants from the roots selected and monitoring the expression of the plantlets obtained by a peroxidase-based colorimetric test;
- (d) sorting according to phenotype and optionally carrying out the molecular analysis of the progeny of the transgenic plants, allowing the selection or the confirmation of transgenic plants obtained containing only the transgene and not the T-DNA specific to *A. rhizogenes*.

Application: Obtaining of transgenic plants